



### Application range

- Request or extension of green phases of traffic light installations
- Presence detection up to 3 minutes
- Counting
- Measurement of time of occupancy

### Features

- Fast response
- Insensitive towards environmental influence
- Suitable for outdoor use
- Easy installation and service
- Easy alignment
- Static holding time (up to 3 minutes)

### Description:

The passive infrared detector IRD1001 operates, as the IR-detectors 901 and 903, according to the principle of contactless temperature measuring.

The wavelength range of this passive infrared radiation is between (8 – 14)  $\mu\text{m}$ . Radiation within this range is only slightly weakened by environmental influences like fog or rain. After a defined transient period of the detector, an adjustment to the background radiation takes place. Fluctuations of ambient temperature are automatically compensated. Vehicles moving within the detection area are being recognized because of their differing temperature compared to the background temperature. The detector's distinctive feature lies in its ability to not only detect movement (difference of temperatures), but also to register a vehicle's presence for up to three minutes.

An intelligent software adjusts the detector's sensitivity depending on environmental influences, so that a defined signal-to-noise ratio is ensured. Additionally, the basic sensitivity can be predetermined in four levels.

The universal mounting unit enables pole mounting with a tension band or wall mounting. After connecting the detector to the power supply and connecting the relay contacts, the detector has to be adjusted.

<b>Power Supply:</b>	230 V AC (optional: 42 V AC, 42 V DC, 24 V DC) Tolerance: +6 % / -10 %
<b>Power Consumption:</b>	approx. (3 – 4) W
<b>Output:</b>	potential free relay contact (change-over contact) max. 250 V DC, 230 V AC (50 Hz), (in acc. with VDE 0110) $I_{\max}$ 0.5 A, $P_{\max}$ 50 W DC / 100 VA AC ( $\cos\varphi$ min.: 0.5)
<b>Isolation group A:</b>	150 V DC, 125 V AC (50 Hz)
<b>Spark suppressing :</b>	The switching outputs are protected by spark suppressing units, consisting of an RC-element (10 $\Omega$ , 0.022 $\mu$ F). Connecting a high-impedance AC-load can therefore lead to a voltage drop on this load, in spite of an open switch (RC-element is then connected in series with the load).
<b>Switching display</b>	LED included, connection for external LED ( $I_F = 2$ mA)
<b>Tuning:</b>	automatic after approx. 60 sec.
<b>Detection range:</b>	(0.5 – 20) m
<b>Angular aperture:</b>	6° - 8°
<b>Sensitivity :</b>	adjustable from approx. (0.5 – 2.0) Kelvin The product of temperature difference and the percentage of the covered detection area has to be equal or greater than the value of the adjusted sensitivity. This is necessary for the detector to switch.
<b>Permissible vehicle speed</b>	(3 – 70) km/h
<b>Switch-off delay:</b>	(0 – 10) sec. adjustable
<b>Hold time (max. occupancy)</b>	(0 – 3) min. adjustable
<b>Operating temperature range:</b>	in accordance with DIN VDE 0832
<b>Storage temperature range:</b>	-40°C to +80°C
<b>Enclosure:</b>	anodised aluminium
<b>Safety:</b>	IP 64
<b>Connection:</b>	clamp terminal (cable lead-in via two PG 11 screw fixings)
<b>Weight:</b>	approx. 2 kg
<b>Technical Data / Conformity</b>	
<b>Safety, Health</b>	Guideline 73/23/EWG, R&TTE, Art. 3 (1)
<b>EMV</b>	Guideline 89/336/EWG, R&TTE, Art. 3 (1)
<b>Radio</b>	Not applicable

### Dimensions (in mm)

